

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A microarray consisting of ~~a solid support onto which at least two nucleic acid molecules are bound~~, at least 90% of which are either:

(a) nucleic acid molecules that encode polypeptides of complex I, II, III, IV, or V of the mitochondrial respiratory chain, said polypeptides being naturally coded for by a nuclear gene, or

(b) fragments of the nucleic acid molecules of (a), said fragments being at least 15 nucleotides in length.

2. (Previously presented) The microarray of claim 1, wherein at least one of said nucleic acid molecules encodes a polypeptide selected from the group consisting of an ATP synthase (mitochondrial F0 complex, subunit c, isoform 3), VDAC1 pseudogene (porin protein, isoform 1), ubiquinone-binding protein, ATP synthase (mitochondrial F0 complex, subunit d), mitochondrial ribosomal protein L3, cytochrome c oxidase subunit VIIb, ATP synthase (mitochondrial F0 complex, subunit f, isoform 2), dynamin 1-like protein, voltage-dependent anion channel 2 (porin), Cytochrome c oxidase subunit VIIa polypeptide 2 (liver), ATP synthase (mitochondrial F1 complex, O subunit), voltage-dependent anion channel 1 (porin), single-stranded DNA binding protein, fumarate hydratase, solute carrier family 25 (member 4), ATP synthase (mitochondrial F1 complex gamma polypeptide 1), NADH dehydrogenase ((ubiquinone) 1 alpha/beta subcomplex 1, 8kDa), and 3-oxoacid CoA transferase, or a fragment thereof.

3-38. (Canceled)

39. (Previously presented) The microarray of claim 1, wherein at least two of said fragments are at least 40 nucleotides in length.

40. (Previously presented) The microarray of claim 1 consisting of at least 10 nucleic acid molecules.

41. (Previously presented) The microarray of claim 40 consisting of at least 25 nucleic acid molecules.